

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: HALL POND	Lake Area (ha): 5.87
Town: CHARLESTOWN	Maximum depth (m): 1.6
County: Sullivan	Mean depth (m): 0.8
River Basin: Connecticut	Volume (m ³): 47500
Latitude: 43°15'08" N	Relative depth: 0.6
Longitude: 72°21'39" W	Shore configuration: 1.51
Elevation (ft): 1010	Areal water load (m/yr): 16.49
Shore length (m): 1300	Flushing rate (yr ⁻¹): 20.50
Watershed area (ha): 212.0	P retention coeff.: 0.50
% watershed ponded: 0.0	Lake type: artificial

BIOLOGICAL:

6 February 2002

11 July 2001

DOM. PHYTOPLANKTON (% TOTAL)	#1	NO WINTER	DINOBRYON 40%
	#2	SAMPLES COLLECTED	SYNURA 15%
	#3		CHRYOSOPHAERELLA 10%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			6.57
DOM. ZOOPLANKTON (% TOTAL)	#1		NAUPLIUS LARVA 37%
	#2		POLYARTHRA 19%
	#3		CYCLOPOID COPEPOD 15%
ROTIFERS/LITER			217
MICROCRUSTACEA/LITER			444
ZOOPLANKTON ABUNDANCE (#/L)			711
VASCULAR PLANT ABUNDANCE			Common
SECCHI DISK TRANSPARENCY (m)			1.5 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		11.5	7.7
BACTERIA (E. coli, #/100 ml)	#1		1
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: HALL POND
Town: CHARLESTOWN

	6 February 2002		11 July 2001		
DEPTH (m)	1.0		1.0		
pH (units)	6.5		6.8		
A.N.C. (Alkalinity)	7.6		7.8		
NITRATE NITROGEN	0.24		< 0.05		
TOTAL KJELDAHL NITROGEN	0.20				
TOTAL PHOSPHORUS	0.014		0.020		
CONDUCTIVITY (μ mhos/cm)	49.2		26.0		
APPARENT COLOR (cpu)	22		43		
MAGNESIUM			0.90		
CALCIUM			3.2		
SODIUM			1.9		
POTASSIUM			< 0.40		
CHLORIDE	3		2		
SULFATE	7		4		
TN : TP	31				
CALCITE SATURATION INDEX			3.1		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 2001

D.O. S.D. PLANT CHL TOTAL CLASS

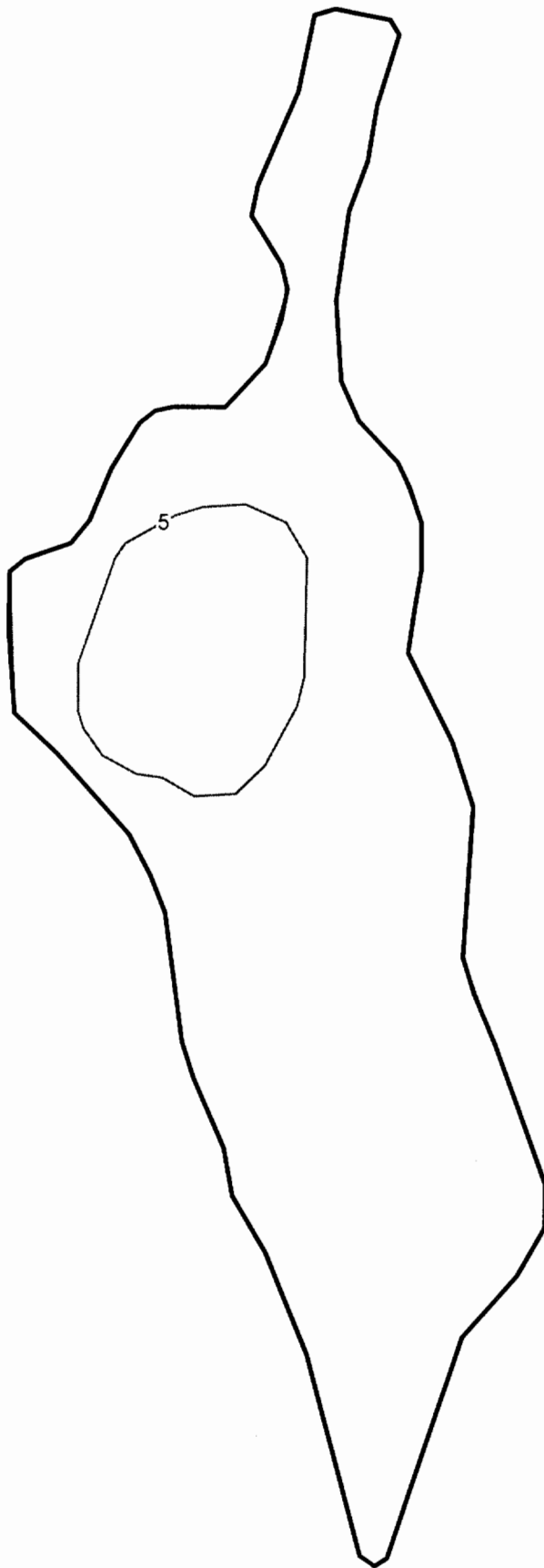
**	2	3	1	6	Meso.
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COMMENTS:

1. This is a somewhat remote pond with no development located down a 4-wheel drive road. The entire shoreline was wooded.
2. A small boat or canoe can be launched adjacent to the concrete dam but it is not a maintained access site. No designated area for parking.
3. Summer phytoplankton were varied – 20 genera observed – but were dominated by Chrysophytes. Zooplankton were abundant.

Hall Pond

Charlestown



5 foot depth contour



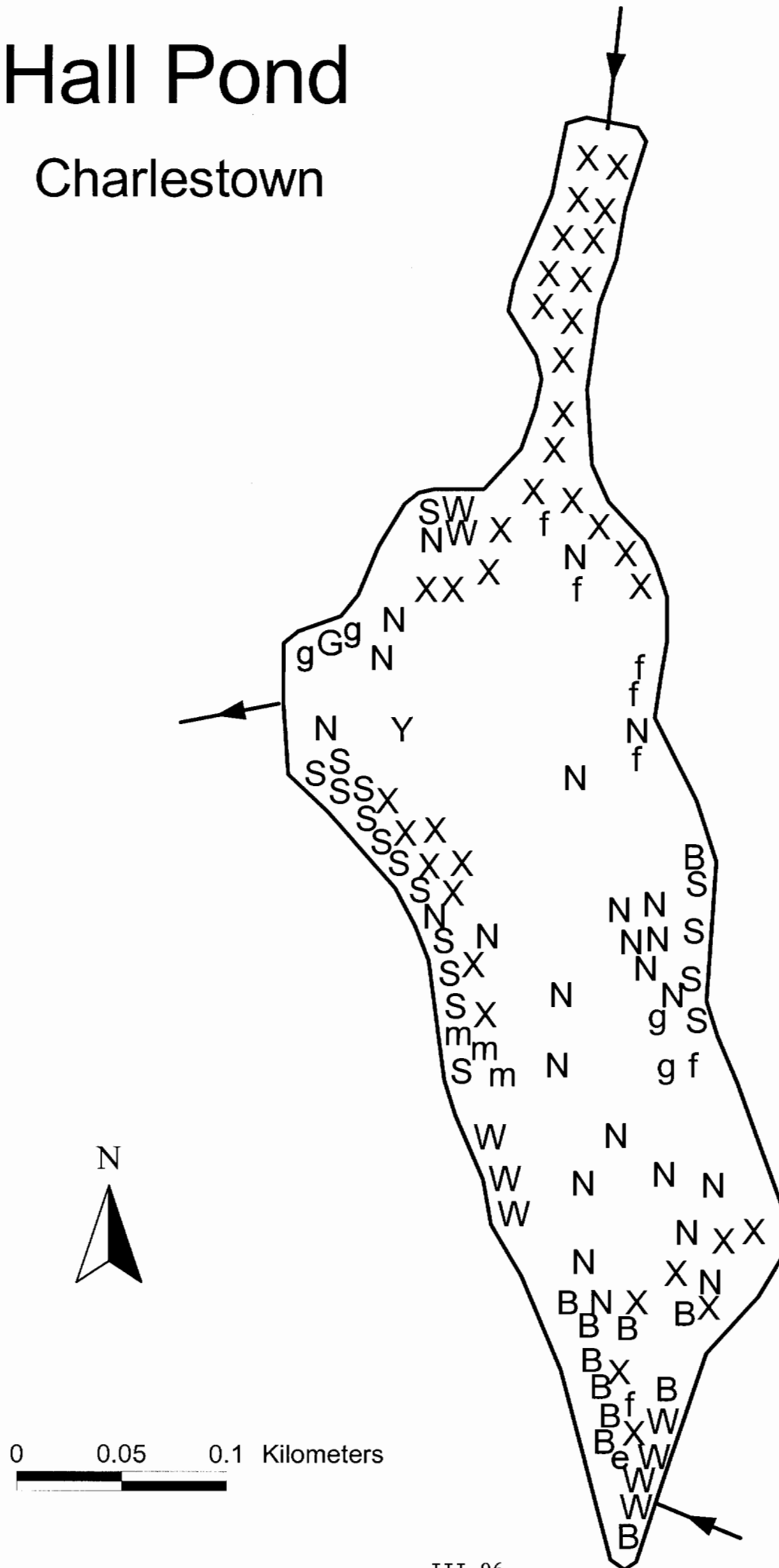
0 0.05 0.1 Kilometers

III-94

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Hall Pond

Charlestown



III-96

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